

MONTANA HIGHGROUND



ICE GORGE ON THE MADISON RIVER

PHOTO BY: S WINGARD - DNRC

Understanding and Mapping Ice Jams

Submitted by: Kathy Chase | USGS | kchase@usgs.gov

Ice jams in and along rivers can cause flooding, injuries and loss of life, scouring, and structural and environmental damage. They are a major hazard across the northern United States according to the U.S Army Corps of Engineers (USACE). An ice jam can cause the river stage to rise, and the resulting backwater to flood areas upstream. Also during ice melt and breakup the ice jam can release suddenly and cause flooding downstream.

Communities vulnerable to ice jams need information about where and how often ice jams might occur, as well as information about ongoing ice jams that might threaten lives and property. U.S. Geological Survey (USGS) real-time streamgages are often located on rivers that jam, and the data allow communities prone to ice jam flooding to track the river stage and be alerted to potential flooding.

The USGS has collaborated with Montana Silver Jackets (MSJ) and other agencies, to create a beta website where authorized user groups can enter new ice jam data from mobile devices and view ice jam data on an interactive map. The USGS is currently seeking funding to roll out a productive version of this Ice Jams website. The USACE and MSJ have committed funding for staff, outreach, and education for the website. Ice jam data is necessary to assess vulnerability of river structures and property, to assist communities responding to ongoing ice jam hazards, and to develop prediction capability for planning, early warning, and hazard response.

For more Information on ice jams see: USACE Ice Jam Database at
<https://icejam.sec.usace.army.mil/ords/f?p=101:7>

NEWSLETTER HIGHLIGHTS

Ice Jams

- Understanding and Mapping Ice Jams
- The Madison River: Ice Jam Flooding
- The Gorge-ous Madison River

The Gibson Flats Wildfire: Permitting in the Floodplain

Montana Snotel and Drought Updates: Outlook for Summer

Mobile and Manufactured Residents Face Higher Flood Risk

New Help Guides Available

Mitigation Funding Opportunities

Connecting Funding to Local Level

Resources and Training Around the Floodplain

Montana DNRC Contacts



Madison River Mapping Study Includes Ice Gorge Flooding

By: Shylea Wingard (DNRC Floodplain)

The DNRC contracted with Michael Baker International (MBI) to prepare a floodplain mapping study of Southwest Montana's Madison River. The report was published in May 2020 and provides a relevant look at ice jam flooding. Typically flooding on the Madison occurs during the winter months (December-March) as result of ice gorging or freeze-up jams during extended periods of extreme cold weather.

According to MBI ice gorges occur over long river runs (in excess of 10 miles) reducing the conveyance area of the channel(s) by the local development of ice, while freeze-up jams involve ice that is transported downstream and accumulates on fixed ice cover or at hydraulic constrictions.

Historical records dating back to 1867 document ice jam flooding on the Madison River near Three Forks. The Madison is also well known for the ice gorge flooding that occurs near Ennis. In 1922, J.C. Stevens wrote, "The Madison is probably the largest river in the state in which river overflow conditions [caused by ice gorges] are so pronounced. The reasons are not hard to find. The Madison River has a fairly steep gradient throughout its course. In the two valleys [near Three Forks and Ennis] the banks are low, the river is shallow and wide, and the bed is strewn with boulders, cobble stones and gravel."

When temperatures drop below freezing the river channel becomes choked with frazil ice and anchor ice. Frazil ice collects, and floats in the rapid river flow, giving the appearance it is flowing with slush rather than water. Anchor ice forms and attaches to rocks along the river floor. The developing combination of frazil and anchor ice effectively dam the river and instigate "the overflow gorge". Once this happens, the river leaves its channel leaving the flooded areas covered with solidified frazil ice several feet thick in some areas. Due to the current lack of development only a few residential homes have been threatened and minimal economic damage has occurred to State Highway 287, local parks, fishing access sites, and fences.

Incorporating Ice Jams Into Flood Mapping Studies

Not all floodplain studies incorporate the effects of ice jams into their mapping studies. Current FEMA guidelines indicate that Mapping Partners are usually not required to address freezeup-type flooding when performing enhanced mapping studies, other than when possible exceptions exist, such as when the ice jam occurrence during low magnitude flows can yield water surface elevations substantially higher than open water 1% annual chance conditions. Stream gage data showing ice-affected readings are usually needed to see if ice causes significantly higher flood levels than open water flooding. Stream gage data near Three Forks indicated that the ice-affected stages of the lower Madison River can be significantly higher than open water stages. Michael Baker International incorporated this analysis into its study.

To view the full report and ice analysis, see:

http://dnrc.mt.gov/divisions/water/operations/floodplain-management/madison/mapping-and-technical-information-1/MadisonRHydAndMap_20200519_Body.pdf

http://dnrc.mt.gov/divisions/water/operations/floodplain-management/madison/mapping-and-technical-information-1/ThreeForks_IceJam_20200122.pdf



Above: A fishing access is closed due to ice jam flooding. Photo by: S Wingard

The Gorge-ous Madison River

Submitted by: Cody Marxer, Planner | Floodplain Administrator
Madison County Planning Office | cmarxer@madisoncountymt.gov

The beautiful and clear Madison River, flowing through two agricultural valleys within Madison County, is a well-known recreationist's dream and vital resource for the Madison Valley. Extended cold periods in the winter months often result in dramatic ice gorging events. The Madison River is likely the largest river in the state to experience such pronounced overflow conditions resulting from ice gorges. If you've read an article or discussed the Madison ice gorging to any extent, you've likely heard that it "freezes from the bottom up."

FREEZES FROM THE BOTTOM UP

While this is a valid description of what you might visually observe on the Madison, the ice gorges are largely a result of frazil and anchor ice accumulations within the river. Frazil ice, or slush ice, forms when turbulent river water becomes supercooled and small crystals form within the water column or on the surface. The crystals cluster, forming large floating masses that appear as snow floating in the water. The clusters can grow large enough to jam the streamflow. Anchor ice forms in shallow, low velocity channels on large objects within the stream body. When air temperature rises, anchor ice releases and floats to the surface, which provides an excellent platform for frazil ice formation. These formations rapidly grow, as flowing water adheres to the anchor ice. Anytime the air temperature is below freezing, rivers are continually manufacturing ice. And, generally, the lower the air temperature, the faster the ice formation. When these formations become large in size and quantity, they form ice gorges that not only block the channel flow but can also force the water up and over the banks and into the adjacent floodplain. The visual result is a sea of icy, snow-covered, frozen fields.

The ice gorging events on the Madison River are a prime example of why it is so important to consider floodplain development and other guidelines when building or buying in an area adjacent to a water body or within a designated floodplain. Although the Madison, and other shallow and wide rivers with low banks, may not appear threatening, flooding events are possible, even in the winter months. It's important to know the history of your property and community and to have a plan in place, in the instance of a flood emergency. Floodplain regulations are implemented to protect property owners from damage caused by a natural event like ice gorging and simultaneously monitor development while protecting streams and floodplains. Your local Floodplain Administrator, Office of Emergency Management, and DNRC Floodplain Specialists are excellent resources for identifying flood-related issues, assisting with concerns, and providing information for mitigation and recovery.



Photo by: Joe Brummel,
Madison County DES Coordinator

During extended cold periods and freezing temperatures, the Madison River forms anchor and frazil ice along its banks and river bottom. Eventually it blocks the channel and the river pushes over its low banks causing flooding throughout the valley floor. This phenomenon occurs so regularly locals say "it freezes from the bottom up."



The Madison River Gorge
Photo by: Shylea Wingard

Ice Gorges vs Freeze-up Ice Jams

The Michael Baker International report indicates ice gorges occur over long river runs (in excess of 10 miles where the conveyance area of the channel(s) is reduced by the local development of ice. Freeze-up ice jams involve ice that is transported downstream and accumulates on fixed ice cover or at hydraulic constrictions.

Gibson Flats Fire Affects Floodplain

Submitted by:

Charity N Yonker, Planning Director/Floodplain Administrator

Cascade County Planning Department |

cnyonker@cascadecountymt.gov

On December 1, 2021, when most people were preparing for the holidays, Gibson Flats area residents awoke to fire and evacuation. The wind-driven fire burned approximately 112 acres, including 13 homes, and 11 outbuildings of which a majority was located in a Special Flood Hazard Area (SFHA) just south of Great Falls.

Immediately after the fire, the Cascade County Planning Department conducted a community survey to gather information. A fire map showing all lost structures was prepared and substantial damage letters issued. As a Floodplain Administrator, you do not always consider or think of fire emergencies as floodplain emergencies, and nor does the community.

The County Commission issued a Press Release advising residents of the increased risk of flooding after fire. The Press Release was also used as a tool to direct residents to contact the Planning Department to complete the Emergency Notification form to begin the debris clean-up and the recover process. Meanwhile, the County began coordinating waste removal services with a local provider and advising residents on how to stop taxation on lost structures. Simultaneously, other groups were putting boots on the ground to pull together valuable community resources.

By that weekend, the American Red Cross facilitated a recovery event at the fairgrounds where a number of local officials were present, including a Cascade County Commissioner and the Cascade County Floodplain Administrator. Many affected residents completed the Emergency Notification form before they left the event. Others learned prior to rebuilding they needed to adhere to National Floodplain Insurance Program (NFIP) regulations, obtain a floodplain permit, and follow applicable county and state guidelines.



ABOVE: The remains of one of eleven outbuildings burned and destroyed in the Gibson Flats Fire on December 1st, 2021. (Photo By: Gary Poore - Cascade County Planning Dept)



Above: Gibson Flats, an unincorporated area south of Great Falls suffered wildland fire damage in December. (Photo by: S Wingard)

The recovery event provided area residents the opportunity to network and obtain necessary information from different agencies in one location. It also provided an opportunity for the agencies to coordinate their assistance and messages. During the meeting a local engineer volunteered the assistance of his firm to assist all affected residents with the submission of the floodplain application for debris removal. Another advantage of the meeting was information was able to be delivered in a single setting without having to visit multiple property owners or agencies. The event provided a clearer path forward for Gibson Flat residents and helped ease some of the strain, stress and and uncertainty of this devastating and emotional event.

Holding a single recovery event for all agencies and Gibson Flat residents was a beneficial way to deliver information and forms while easing the uncertainty and stress property owners face when rebuilding after the devastating and emotional property losses.

The County Commissioners repeated their objective and questions to County Department Heads, "What can we do to help Gibson Flat residents?" The Commissioners relied on the information provided by the Floodplain Administrator to make informed decisions when it came to regulating, rebuilding and permitting in the floodplain. Permits can not be waived as they fall under state and national guidelines, however, Cascade Commissioners passed a County Resolution to waive all floodplain permitting and zoning fees to ease the financial burden of residents affected by the fire.

As citizens recover, social media has become an indispensable asset to the community. It has allowed for daily interactions among displaced neighbors and opportunities to provide accurate information and combat misinformation. Some residents were told they could not rebuild their homes in the floodplain, while others were told Gibson Flat area is no longer a floodplain at all. Outreach will continue as the community works toward recovering from what has been termed the most destructive fire event in recent history.

A La Niña Winter Weather Update

Submitted by: Ray Nickless, National Weather Service

Snowpack and Precipitation

The current La Niña weather pattern has provided much needed moisture to drought-stricken areas of Montana; however, the precipitation has not been equally distributed. Western Montana has been the biggest beneficiary of the precipitation this fall and winter while eastern Montana continues to battle drought conditions. The fall and early winter had a series of "Atmospheric Rivers" that produced much above normal rainfall for northwest MT. The Lower Clark Fork, Flathead and Kootenai River basins received between 109% and 138% of normal precipitation, mostly in the form of rain. Other river basins that received above normal precipitation this fall and early winter were the Jefferson, Gallatin, Madison and St Mary's River basins.

Mountain snowfall began to accumulate in earnest in the months of December and January and have produced mostly normal snowpack conditions across the mountains of Montana with the exceptions being the Helena Valley, Smith, Judith, Musselshell and Upper Yellowstone River basins that continue to be below normal in snowpack.

Valley precipitation across the state is a mixed bag of normal to below normal precipitation. The Water Year percent of normal period of October 1st through February is indicating normal precipitation in the cities of Missoula, Kalispell, Bozeman and Billings while below normal precipitation has fallen in Butte, Helena, Great Falls and Glasgow.



Dust conditions were photographed south of Winnett in Petroleum County on February 10th, 2022 by local Glasgow photographer, Sean R Heavey.

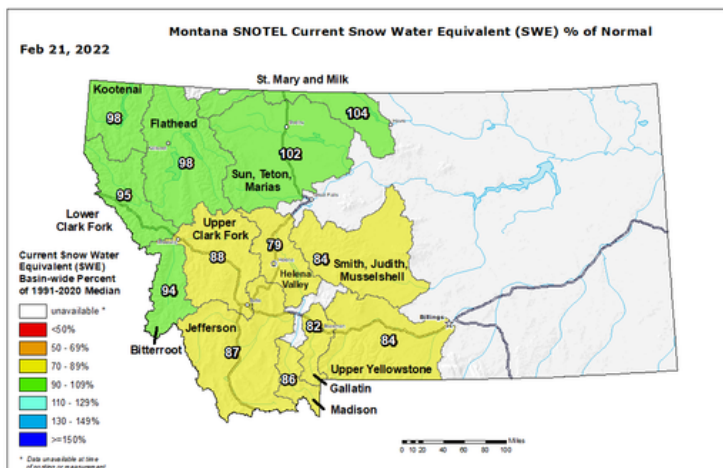


Most years blowing snow not dust makes February driving conditions hazardous in Eastern Montana. Long-time Meteorologist Tanja Fransen, NOAA/NWS in the Glasgow, MT says "This is the first time I recall seeing dust like this, in February." (Photo by: Sean R Heavey, Glasgow, MT)

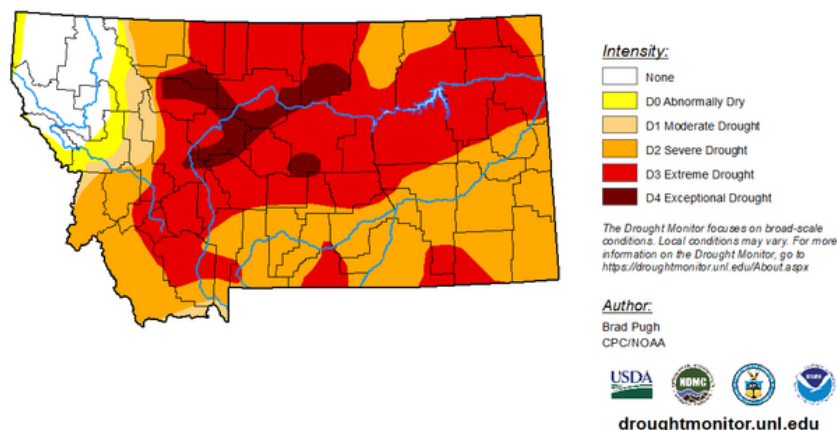
Drought and Weather Outlook

Drought conditions in Northwest Montana have improved after receiving considerable moisture over the winter while a majority of the state remains entrenched in drought. NOAA's Climate Prediction Center is forecasting La Niña conditions to persist into the spring of 2022.

The weather forecast for the combined months of March and April is calling for cooler and wetter than normal conditions for western Montana due to the effects of the La Niña influence. In eastern Montana the La Niña influence is not trending to cooler and wetter weather like the western part of the state.



ABOVE: The Snow Water Equivalent (SWE) for Montana Basins shows snowpack levels for Northwest Montana with normal to above-average conditions. (USDA-NRCS)



ABOVE: U.S Drought Monitor Map for Montana as of February 15th, 2022. Most of the state is in severe, extreme and exceptional drought conditions while Northwest MT is relatively free from drought.

Mobile and Manufactured Home Residents Face Higher Flood Risk

A Report by Headwaters Economics |

www.headwaterseconomics.org

Contact: Kris Smith, PhD | kris@headwaterseconomics.org



A recent research report by Headwater Economics found that mobile and manufactured housing types face higher flood risk than other housing types. Kris Smith of Headwaters Economics explained the idea for the research originated when a project engineer explained how a sudden ice jam by the Yellowstone River in Glendive, MT could potentially back water-up and over top of a levee, flooding 250 mobile homes with 10 feet of icy water with little-to-no warning. How common was this problem for other mobile and manufactured property owners?

Mobile and manufactured homes are the most common type of unsubsidized, affordable housing for socially vulnerable people, not only in Glendive, but throughout the United States. Both are factory-built homes built to different federal building codes that changed in 1976. Mobile homes were built prior to this change and manufactured homes after.

Research shows this type of housing tends to be located in floodplains and are over-represented in National Flood Insurance Policy (NFIP) claims. Furthermore hazard [mitigation] planning and disaster recovery programs often overlook and rarely account for the unique social and regulatory barriers facing mobile and manufactured home residents. According to the Manufactured Housing Institute, there are 8.5 million mobile and manufactured homes occupied by an estimated 22 million people in the U.S. The median annual household income for owners is \$38,000.



The Headwaters analysis showed mobile housing faces a disproportionately higher risk of flooding than other housing types and reported 1 in 7 mobile homes is located in a high flood risk area compared to 1 in 10 for other housing types.

Headwaters used nationwide flood risk data from Flood Factor to construct an interactive map to identify census tracts that have both high flood risk and high mobile home density. When sorted, Montana was one of the top five states with the most at-risk areas identified. West Virginia topped the list (46%), followed by Louisiana, Idaho, Oregon, and Montana (17%).

Mobile Home Occupants Overlooked After Floods

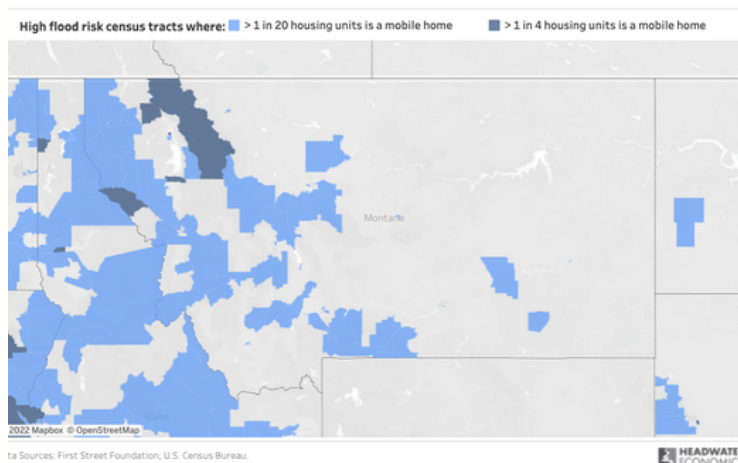
The Headwaters study reports mobile home residents after a flood are more likely to face barriers in accessing federal and state assistance. They are more likely to experience long-term recovery problems and be permanently displaced. Many disaster relief programs are designed to assist homeowners with conventional mortgages while mobile homes are often financed with personal property loans and may not be eligible for benefits. For example, the 2020 Coronavirus Aid, Relief, and Economic Security (CARES) Act excluded most mobile home owners from the mortgage payment relief program and eviction moratoriums.

Additionally, federal disaster programs are based on appraised values. Repair costs for mobile homes can far exceed the value of the home, particularly for older mobile homes. When recovery aid falls short, owners are on the hook for expenses they cannot possibly afford.

To review the full report by Headwaters Economics, go to:

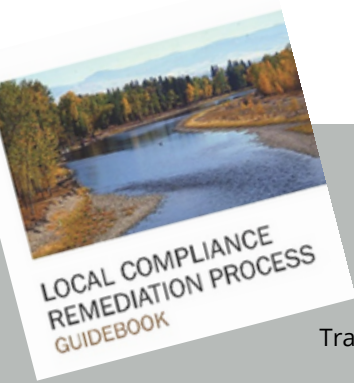
<https://headwaterseconomics.org/natural-hazards/mobile-home-flood-risk/> [headwaterseconomics.org]

Mobile homes in areas of high flood risk



Above: Headwaters Economics developed an interactive map that identifies areas with high flood risk and high mobile home density. Montana ranked #5 in the U.S. for having the most at risk areas identified.

NEW HELP GUIDES



LOCAL COMPLIANCE REMEDiation PROCESS GUIDEBOOK

Submitted By:
Traci Sears, MT NFIP/CAP Coordinator

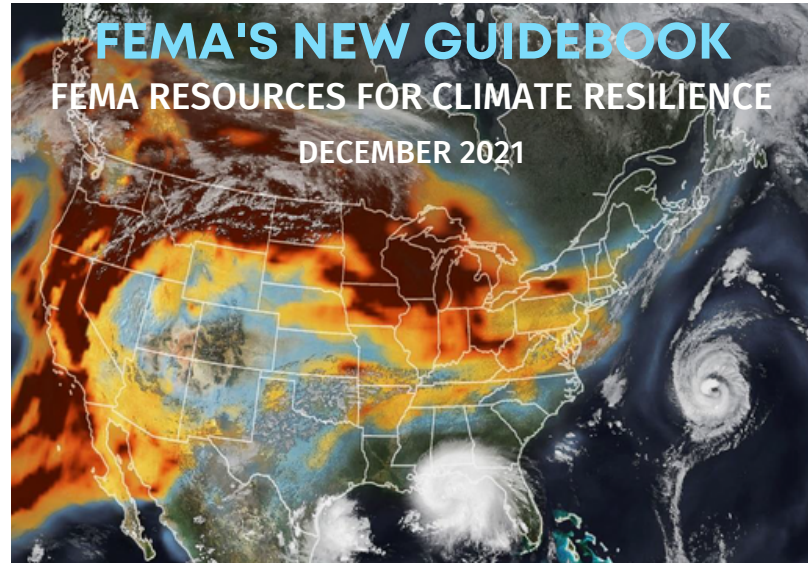
In June 2021 the Local Compliance Remediation Process Guidebook was introduced during a Montana Floodplain Community Assistance Program (CAP) training webinar geared towards local floodplain administrators. The Natural Hazard Mitigation Association (NHMA) was instrumental in bringing expertise and guidance to craft the post-disaster and recovery section. For example, detailed information is provided regarding substantial damage determination, including an honest discussion of the pros and cons.

The guidebook is available to serve as a go-to resource for local officials as they tackle general enforcement issues or for Montana communities that need help recovering from wildfires. The guidebook will be reviewed and updated periodically.

NEED A COPY OF THE LOCAL COMPLIANCE REMEDIATION PROCESS
GUIDEBOOK? EMAIL TRACI SEARS AT: TSEARS@MT.GOV

In 2021 CAP contracted and worked with NHMA to tackle the issue of community compliance for local floodplain programs. In recent years, Montana has experienced historic population growth, due in part to COVID 19, flexibility of work environment, and even the popularity of the show "Yellowstone". Most newcomers are surprised to find their new Montana community has few urban specific regulations and occasionally, some property owners will take a "wild west" approach to development and take advantage of the state's relaxed regulatory approach. Communities often struggle and lack resources to educate property owners about regulations that they may not be aware of, such as water rights or floodplain development permits.

When property owners refuse to comply, skirt, or blatantly ignore a community's floodplain management efforts, communities must implement enforcement procedures. Enforcement is the hardest part of a local floodplain program to administer. It is even harder after a disaster like wildland fire or a flood after a fire strikes a floodplain area. This reality is occurring more often in the mountain west and floodplain administrators (FPAs) struggle to work with affected property owners to ensure substantial repairs or rebuilds comply with NFIP regulations. To assist communities striving to maintain compliance with the NFIP, Montana CAP reached out to NHMA on a collaborative effort to create a Local Compliance Remediation Process Guidebook. NHMA is a non-profit organization dedicated to reducing the impacts of disasters and improving resilience nationwide.



As climate change increases disaster risks across the country, emergency managers and government officials are beginning to implement strategies to build community resilience. FEMA Resources for Climate Resilience provides a roadmap of Federal Emergency Management Agency (FEMA) programs and initiatives that advance community climate resilience. FEMA Resources for Climate Resilience assists FEMA's state, local, tribal, and territorial partners in navigating the FEMA resources that are available to support communities in mitigating impacts of climate change.

NEW FEMA FACTSHEET AVAILABLE WHAT DOES FLOOD INSURANCE COVER IN A BASEMENT?

After a flood event, property owners may not be sure what is included by flood insurance as it pertains to basements. Basement coverage through FEMA's National Flood Insurance Program (NFIP) is limited. The NFIP defines a basement as any area of a building with a floor that is below ground level on all sides. Rooms that are not fully below ground level (such as sunken living rooms, crawlspaces, and the lower-levels of split-level buildings) may still be considered basements because the lowest floor is below ground on all sides.

Basement coverage under the Standard Flood Insurance Policy consists of specific building items in a basement and cleanup. Items must be connected to a power source, where appropriate, and/or installed in their functioning location. Cleanup expenses can include pumping out trapped floodwater, labor to remove or extract spent cleaning solutions, treatment for mold and mildew, and structural drying of salvageable interior foundation elements. Review your flood insurance policy for a comprehensive list of covered items and expenses.



FEMA

SEE THE FACTSHEET:
[HTTPS://WWW.FEMA.GOV/FACT-SHEET/WHAT-DOES-FLOOD-INSURANCE-COVER-BASEMENT#](https://www.fema.gov/factsheet/what-does-flood-insurance-cover-basement#)

Mitigation Funding Opportunities

The following four disaster events have resulted in mitigation funding opportunities for Montana:

HMGP Post Fire - 2021 Fire Season (Disaster # - FM-5392)

\$2.33 million available

Sub-applicant deadline – 3/1/2022 (date will most likely change with approved extension request)

All natural hazard mitigation projects are allowed, however impacted communities and fire mitigation projects receive priority.
State will seek extension on application deadline.

Straight-line Wind Event (Disaster # - DR-4608)

\$341,704 available

Sub-applicant deadline – 7/1/2022

All natural hazard mitigation projects are allowed, however impacted communities receive priority.

Richard Springs Fire (Disaster # - DR-4623)

\$339,528 available

Sub-applicant deadline – 8/1/2022

All natural hazard mitigation projects are allowed, however impacted communities receive priority.

HMGP COVID-19 (Disaster # - DR-4508)

\$4.77 million available

Sub-applicant deadline – 6/1/2022

All natural hazard mitigation projects are allowed.
State will be requesting an extension on application deadline.

The State of Montana is getting ready to begin the Regional Multi-Hazard Mitigation Planning (MHMP) Process, where three regional multi-hazard mitigation plans will be developed for the entire state of Montana. The planning process is facilitated to help local jurisdictions either establish a hazard mitigation plan or update an existing plan to ensure jurisdictional eligibility for Hazard Mitigation Assistance Grant Programs, and other federal funding opportunities through FEMA. The Montana Disaster Emergency Services (DES) Mitigation team has been working to select a contractor and project team to carry out this planning process. A contractor has been selected and will begin work in the Central Region with a kick-off meeting in early 2022 (Date TBD). Montana DES will be working closely with the contractor and participating jurisdictions throughout this planning process.

Additionally, the State of Montana will be responsible for the financial costs/match requirements for the entire regional planning process, including future updates every 5 years as required by FEMA; requiring no cost from participating jurisdictions. The Regional MHMP will provide detail down to the local jurisdictional level including participating incorporated towns and cities throughout the state. The expectation of the participating jurisdictions will be active involvement in their plan development. This includes outlining local hazards, creating mitigation strategies, involving local stakeholders, and public outreach and engagement activities. Contractor staff and Montana DES will assist during all local planning meetings to help facilitate and ensure proper documentation is kept.

To participate, or not, in this planning process, Montana DES is requiring all jurisdictions (Counties, Tribal Nations, and Incorporated Towns and Cities) to fill out a Notice of Intent (NOI) to OPT-IN or OPT-OUT of this first planning process. All Central Region NOI's have been sent out and should be returned to Montana DES at DESMitigation@mt.gov.

For More Information, CONTACT:

Sara Hartley, Montana State Hazard Mitigation Officer

Sara.Hartley@mt.gov

CONNECTING FUNDING OPPORTUNITIES TO THE LOCAL LEVEL

Submitted by: Shaye Bodine, Floodplain Specialist
MT DNRC Floodplain | shaye.bodine@mt.gov



Federal funding opportunities often are a hurdle for most Montana communities. Not only is it difficult to find grants and determine program eligibility, it takes considerable time and resources to prepare application packages—especially if technical analyses are required. However, the effort could be well worth it.

In 2021, the United States made unprecedented levels of federal investment in infrastructure. In March, the American Rescue Plan Act of 2021 (ARPA) allocated \$350 billion. In November, the nearly \$1.2 trillion Infrastructure Investment and Jobs Act (IIJA) allocated more funding for infrastructure projects than Americans had witnessed in generations. How can Montana communities access these federal funds and apply them toward local mitigation projects? This article discusses major grant opportunities and points to resources to help communities navigate, identify, and compete for funding.

American Rescue Plan Act (ARPA)

State HB 632 detailed the rules for allocating ARPA funds in Montana and assigned specific roles to state agencies. The largest portion of ARPA funds was designated for water and sewer infrastructure projects. The Department of Natural Resources and Conservation (DNRC) reviews the water and sewer infrastructure applications submitted by local communities. To help communities apply, a portion of ARPA funds were allocated for outreach and the Department of Commerce (DOC) has a technical assistance team to support local governments. The Department of Environmental Quality was tasked with ongoing technical assistance.

Communities throughout the state have benefited from ARPA funds. For instance, Dillon was awarded \$1.9 million for a new water distribution system. To best use ARPA for flooding mitigation, communities should identify where their flood risk intersects with other infrastructure needs. The DNRC and DOC have amassed a wealth of resources for local governments, including a grant submittal checklist and a series of trainings.

See Montana's one-stop ARPA shop at
www.arpa.mt.gov or by calling 1-844-406-ARPA (2772)

Infrastructure Investment and Jobs Act (IIJA)

Unlike ARPA, the majority of IIJA will not be delivered directly to states for use determination, distribution, and implementation. Funds are allocated according to a formula and distributed through cabinet-level agencies. Communities likely will not have similar outreach as with ARPA. The Montana legislature is not in session during 2022, so the state is unable to allocate IIJA funds until next session. Community officials seeking IIJA resources may need to proactively initiate dialog with state and federal agencies. The US Conference of Mayors drafted a federal investment guide for local leaders. Likewise, the National Association of Counties drafted a list of the major provisions for counties. Communities can prepare to compete for or implement incoming IIJA funds by prioritizing infrastructure deficiencies, identifying actionable solutions, and strengthening relationships with relevant state and federal agencies.

Other Opportunities

There are many pre-existing funding sources. The **Community Development Block Grant-Planning Program (CDBG)** can support general planning. Eligible scopes of work include updating floodplain ordinances, creating a floodplain management plan, or drafting a capital improvements plan for a community's levee. To qualify, a community must be defined as having low to moderate income according to the Department of Housing and Urban Development (HUD). Support for CDBG applications is available through the Montana Department of Commerce.

The Federal Emergency Management Agency (FEMA) offered a second round of **Building Resilient Infrastructure and Communities (BRIC)** funding. Applications were due December 2021 to Disaster and Emergency Services (DES). Communities who wish to submit an application for round three funding should work with MT DES' Mitigation Section. BRIC's Direct Technical Assistance Program (DTAP) can provide planning support for early project stages, including a risk assessment or writing a BRIC application. Unlike other grant programs, a community does not need a current and approved hazard mitigation plan to be eligible for the DTAP.

The **Montana Silver Jackets**, a collaboration by the United States Corps of Engineers (USACE), provides funding for non-structural, planning and assessment flood mitigation projects. Applications are due annually each March. Communities should express interest early and work directly with the DNRC Floodplain Management team to draft a proposal for USACE consideration.

The **Montana Coal Endowment Program (MCEP)** is a state-funded program that typically funds infrastructure such as water and wastewater projects. It could also be used to fund projects that overlap with flood resilience. For instance, a stormwater project that mitigates community flooding, or relocation of an ailing water treatment plant out of the floodplain. Applications are ranked by the Department of Commerce and then sent to the Governor for review and inclusion in the Governor's budget.

Comprehensive Resources

There are many, many more funding options not included in this article. In some cases, communities use the funds from one grant program to satisfy the match requirement of another. To increase awareness of diverse funding opportunities, several agencies have compiled resource options into comprehensive databases. Local governments should consider exploring and identifying appropriate options now – before a flood event.

Links to Resources

State of Montana Mitigation Funding Resource Guide (FEMA)
Federal Flood Risk Management Resources (USACE)
Flood Funding Finder (American Flood Coalition)
Compendium of Programs and Mechanisms for Funding Infrastructure Resilience (CISA)

RESOURCES AND TRAINING

★ www.floodplain.mt.gov/training ★

RISK RATING 2.0
FEMA RESUMES
WEDNESDAY
TRAININGS
STARTING
MARCH 7TH, 2022
WATCH FOR MORE
INFORMATION

SAVE THE DATE
May 24th, 2022
Virtual Compliance Workshop
Watch for more information



Working to promote
common sense floodplain
development for Montana.

Training

Networking

Workshops

AMFM CONFERENCE

MARCH 9-11TH, 2022
COPPER KING INN BUTTE, MT

To Register:
<https://mtfloods.org/>

PLAN TO ATTEND THE 22ND ANNUAL
ASSOCIATION OF MONTANA
FLOODPLAIN MANAGERS
(AMFM) CONFERENCE

Spring Training in Montana

April 20, 2022 – 8:30 – 11:00 am

As natural disasters continue to impact the nation, local communities are tasked with managing and mitigating community risks. Federal directives are constantly changing as rising costs and frequency of disasters shift financial burdens and responsibilities beyond federal capacity.

Since flooding in Montana is most prevalent in the spring, this training is appropriately timed to help communities be prepared and will address community response to new directives including DRRA 1206, ESA changes, and local substantial damage/ improvement plans.

Presented by:

Traci Sears, MT NFIP Coordinator
Shaye Bodine, MT CAP Specialist



*LEFT: The Big Hole River
near Twin Bridges, MT
joins the Beaverhead River
to form the Jefferson.
Low water flow concerns
both recreationists and
irrigators alike.
(Photo by: S. Wingard)*

Need more information? A training/resource? Community help? CONTACT:

Traci Sears - NFIP/CAP Coordinator | tsears@mt.gov | Ph. 406.444.6654
Shaye Bodine - Floodplain Specialist | shaye.bodine@mt.gov | Ph. 406.444.1343



AROUND THE FLOODPLAIN

Local Floodplain Administrative Directory

<http://www.floodplain.mt.gov/floodplain-management/contacts>



Montana Updates



Goodbye / Best wishes

Jacob Feistner - Lake County - Planner / FPA

Welcome Back

Cody Marxer - Madison County - Planner / FPA

Promotions

Dani Arps - Teton County - Planner / FPA

Tiffani Murphy - Lake County - Planner / FPA

Happy Retirement

Paul Wicks - Teton County - Planner / FPA

NEW: Hailey Kirlin recently joined Insurance Services Offices (ISO). She may be contacting Montana communities about CRS and cycle visits.

SHAYE SHARES

Back from Deployment

As a member of the Montana Air National Guard, I deployed with the 219th RED HORSE Squadron from March to November 2021. Sadly, our unit has nothing to do with horses. Instead, the Rapid Engineer Deployable Heavy Operational Repair Squadron Engineer (RED HORSE) is a heavy construction unit, we build airfields and facilities.

For Guardsmen, deployment can take a toll on civilian careers and not all employers understand the process. Thankfully, I didn't suffer any negative experiences with the DNRC. Rather, the DNRC, especially the Floodplain Program, was extremely supportive the entire time, even as I took time to reconnect with my family before returning to work.

I'm grateful to Shylea for holding down the fort in my absence and thrilled to return to work with her and the rest of the DNRC Floodplain team. I'm also looking forward to seeing everyone at AMFM in March! Hope to see you there!



Photo: CAP Specialist Shaye Bodine meets her nephew for the first time upon return from deployment.

Thanks for your service Shaye!

The DNRC and our Montana communities are glad you're back.

Jesse Aber, III (1952-2021)

Kind Remembrances

Jesse was a water resource planner for the DNRC Water Management Bureau for 21 years. Jesse was absolutely passionate about the weather and kept a close watch on Montana's snowpack, streamflows and weather patterns. His passion and enthusiasm severed him well is his role as DNRC Staff to the Governor's Drought and Water Supply Advisory Committee from 1991 – 2013. The door to his office was often covered with the latest weather maps or maps showing drought condition across Montana. Jesse was tireless in his efforts to educate and promote a better understanding of the role climate variability plays in managing Montana's water resources.

— Paul Azevedo, DNRC Bureau Chief, Water Management



Jesse was an avid weather fanatic and kept a close watch on Montana's snowpack, streamflows and weather patterns while monitoring drought conditions across the state. Jesse was both an enthusiast of historic architecture and champion of historic preservation. As an avid skier, he spent most of his winters skiing the slopes at Bridger Bowl and Great Divide ski areas.

— Michael Downey, DNRC Water Planning Section Supervisor

Jesse was thoroughly committed to the Montana Drought Advisory Committee and all things drought. All the Lt. Governors that chaired the committee totally trusted and relied on him, as did all representatives from all entities that made up the group. This was during the exceptional drought of 2000-2003. Jess made Montana a national model for drought response and planning, and the model for federal drought policies. He was a joy to work with.

— Jack Stults, Former DNRC Water Resource Administrator

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MONTANA HIGHGROUND NEWSLETTER

The Montana Highground Newsletter welcomes your input.
You are invited to share articles, information, ideas,
projects, and photos.

Please email your contributions to:
shylea.wingard@mt.gov

The Highground Newsletter is a quarterly publication of the
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*Persons with disabilities who need an alternative accessible
format of this document should contact the DNRC Public
Information Officer, Cassie Wandersee at (406) 444-0465 or
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ABOVE: The Big Hole River near Twin Bridges, MT in December.
(Photo by: Shylea Wingard)

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